<u>**AMENDMENTS TO THE CLAIMS**</u>

This listing of claims will replace all prior versions of claims in the application:

Listing of Claims:

1.   (currently amended) A computerized system comprising:

a database server operable for receiving a query, the query including mode information <u>designating a mode from a plurality of modes</u> that specifies, within the query itself, a hierarchical data stream organization, and generating a rowset in response to the query; and

a rowset processor, operable for receiving and processing the mode information of the query and the rowset, to generate a data stream organized according to the hierarchical data stream organization specified by the mode information.

2.   (original) The computerized system of claim 1, wherein the query is a structured query language (SQL) query.

3.   (original) The computerized system of claim 2, wherein the query is a flat query.

4.   (original) The computerized system of claim 1, wherein the hierarchical data stream is an extensible Markup Language (XML) data stream.

5.   (original) The computerized system of claim 1, wherein the mode information comprises one or more table names.

6.   (original) The computerized system of claim 1,wherein the mode information comprises an ordered list of one or more tables.

7.   (original) The computerized system of claim 1, wherein the mode information comprises explicitly defining a nesting of requested data and a naming of requested columns in a hierarchical data stream.

8.   (original) The computerized system of claim 1, wherein the rowset processor transforms the rowset into a universal table subsequently processed to generate a hierarchical data stream.

9.   (currently amended) A computerized system comprising:

a database server operable for receiving a structured query language (SQL) query, the query including mode information designating a mode from a plurality of modes that specifies, within the query itself, a hierarchical data stream organization, and generating a rowset in response to the query; and

a rowset processor, operable for receiving and processing the mode information of the query and the rowset, to generate a data stream organized according to the hierarchical data stream organization specified by the mode information.

10.   (original) The computerized system of claim 9, further comprising:

a client coupled to the rowset processor, the client is capable of receiving the hierarchical data stream.

11.   (currently amended) A computerized system comprising:

a database server operable for receiving a query, the query including mode information designating a mode from a plurality of modes that specifies, within the query itself, an extensible Markup Language (XML) data stream-organization, and generating a rowset in response to the query; and

a rowset processor, operable for receiving and processing-the mode information of the query and the rowset, to generate a data stream organized according to the XML data stream organization specified by the mode information.

12.   (original) The computerized system of claim 11, further comprising:

a client capable of providing the query to the database server and receiving the XML data stream from the rowset processor.

13.   (currently amended) A computerized system for generating an XML data stream from a query, the computerized system comprising:

        a database server operable for receiving the query, the query specifying a mode from a plurality of modes for organizing information, and generating a rowset in response to the query; and

        a rowset processor operable for receiving and processing the query and the rowset to generate the XML data stream organized according to the specified mode.

14.   (original) The computerized system of claim 13, wherein the database server is a database system.

15.   (original) The computerized system of claim 14, wherein the database system is a relational database system.

16.   (original) The computerized system of claim 13, wherein the query includes a clause directing the rowset processor to return the XML data stream.

17.   (original) The computerized system of claim 13, wherein the query includes information defining the XML data stream.

18.   (original) The computerized system of claim 17, wherein the mode information defining the XML data stream organization is primary-foreign key information included in the query.

19.   (original) The computerized system of claim 17, wherein mode information defining the XML data stream organization is implied in the ordering of a number of tables included in the query.

20.   (original) The computerized system of claim 17, wherein the information defining the XML data stream is explicitly provided in the query.

21.   (original) The computerized system of claim 13, wherein the query is a flat query.

22.   (original) The computerized system of claim 13, wherein the query is a nested query.

23.   (original) The computerized system of claim 13, wherein the rowset processor is a subsystem of the database system.

24.   (original) The computerized system of claim 13, wherein the rowset processor is an add-on to the database system.

25.   (original) The computerized system of claim 13, further comprising:

a client system operable for transmitting a query to the database server and receiving the XML data stream.

26.   (currently amended) A method of generating an XML data stream from a query, the method comprising:

forming the query, the query including mode information designating a mode from a plurality of modes defining the XML data stream;

transmitting the query to a database server to generate a rowset;

extracting the mode information from the query;

utilizing the mode information in transforming the rowset into an XML element; and

returning the XML element in the XML data stream organized according to the specified mode.

27.   (original) The method of claim 26, wherein transforming the rowset into an XML element comprises:

mapping each non-null column value of the rowset to an attribute of the XML element.

28.   (currently amended) A method of generating an XML data stream from a query, the method comprising:

creating a query, the query including mode information <u>designating a mode from a plurality of modes</u> that specifies, within the query itself, an extensible Markup Language (XML) data stream organization by a primary-foreign key relationship;

transmitting the query to a database sewer to generate a rowset;

transforming the rowset into a nested XML tree by using the primary-foreign key relationship to determine nesting in the nested XML tree; and

processing the nested XML tree to return the XML data stream, organized according to the determined nesting in response to the query.

29.   (original) The method of claim 28, wherein creating a query containing a primary-foreign key relationship comprises:

ordering tables in the query to produce an organization of the XML data stream for a one to many relationship.

30.   (original) The method of claim 28, wherein transforming the rowset into a nested XML tree by using the primary-foreign key relationship included in the query to determine nesting in the nested XML tree comprises:

forming a nesting schema from the nested XML tree; and

utilizing the nesting schema to transform the rowset into a nested XML tree.

31.   (original) The method of claim 28, wherein processing the nested XML tree to return the XML data stream in response to the query comprises:

representing each table listed in the query that has at least one column in a query result as an XML element.

32.   (original) A method of generating an XML data stream from a query having a table ordering, the method comprising:

forming a query having a number of tables included in the query that define the XML data stream;

transmitting the query to a database server to generate a rowset; and

transforming the rowset into the XML data stream in response to the query, the data stream organized according to the order of the tables in the query.

33.   (original) The method of claim 32, wherein transforming the rowset into the XML data stream comprises:

forming a nesting schema from the number of tables included in the query; and utilizing the nesting schema to transform the rowset into the XML data stream.

34.   (currently amended) A tangibly embodied computer-readable medium having computer-executable instructions for performing operations comprising:

forming a query in which [[the]] an XML data stream has an organizational structure defined by a mode of a plurality of pre-defined modes in the query;

transmitting the query to a database server to generate a rowset; and

processing the rowset to produce the XML data stream in response to the query, wherein the XML data stream is organized according to the organization structure defined by the mode.

35.   (original) The computer-readable medium of claim 34, wherein processing the rowset to return the XML data stream in response to the query comprises:

transforming the rowset into a universal table; and

processing the universal table to produce the XML data stream.

36.   (original) The computer-readable medium of claim 35, wherein transforming the rowset into a universal table comprises:

executing a union over all selections in the query.

37.   (currently amended) A method to produce a hierarchical data steam, the method comprising:

    forming a query in which the hierarchical data stream has an organizational structure defined <u>explicitly</u> in the query;

    transmitting the query to a database server to generate a rowset; and

    processing the rowset to produce a data stream in response to the query, wherein the produced data stream is organized according to the organizational structure defined in the query.

38.   (original) The method of claim 37, wherein the query is a SQL query.

39.   (original) The method of claim 37, wherein the organizational structure is one or more of the group comprising one or more table names, an ordered list of one or more tables, and an explicit definition of a nesting of requested data and a naming of requested columns in the hierarchical data stream.

40.   (original) A method to produce a hierarchical data steam from a query comprising:

    receiving the query, the query including information for generating a universal table;

    generating a rowset in response to the query; and

    processing the rowset to produce the data stream defined by the universal table, wherein the query comprises information expressly defining nesting of the data stream and information expressly defining column names for the data stream.

41.   (currently amended) A method according to claim <u>40</u> [[1]], wherein the query further comprises one or more of element tags and parent tags.